Appln. No. 10/044,824

Amdt dated: November 2, 2004

Reply to Office Action of July 20, 2004

Amendments to the Specification:

Please replace the paragraph beginning at page 3, line 13, with the following rewritten paragraph:

-- The method of the present invention relates to reloading a pipette tip holder of the type having a generally flat support surface that is provided with an array of openings adapted to receive and hold an array of tips in a tip support position with the tip ends pointing downwardly, the method comprising the steps of (1) supporting the array of tips in an array of apertures on a transfer device, the apertures arranged to align with the array of openings in the pipette tip holder, (2) positioning the transfer device and the array of tips supported thereon over the holder with the tip ends extending into the openings, and (3) pushing the tips downwardly through the transfer device and into the tip support position on the tip holder. The pipette tips are typically of the type having a tapered tip end and an upper mounting sleeve defining a shoulder with the tip end and, in accordance with the preferred method of the present invention, the supporting step comprising engaging the shoulders of the mounting sleeves of the tips in the peripheries of the apertures in the transfer device. Preferably, the peripheries of the apertures in the transfer device are defined by resilient flexible lips, and the gripping-supporting step comprises resiliently gripping supporting said tip mounting sleeves with said lips. --

Please replace the paragraph beginning at page 6, line 1, with the following rewritten paragraph:

-- approximately equal to diameters of the openings 13 in the main pipette tip holder. Thus, when a pipette tip is inserted by its lower tip end 15 through the aperture 22 in the transfer plate 20, the lower edges of the ribs 17 on the tip mounting sleeve define an interrupted shoulder 25 by which the tip is supported on the flexible lips 23. This arrangement is shown in detail in Figs. 2a, 4 and 5. As best shown in Figs. 2a and 5, the flexible lips 23 are substantially thinner than the flat main body portion 21 of the transfer plate 20. The pipette tips 11 shown in the drawings have six circumferentially spaced and axially extending ribs 17 such that, regardless of the rotational orientation of

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a tip 11, there will always be a rib shoulder 25 in contact with and supported by a flexible lip 23. --

Please replace the paragraph beginning at page 7, line 15, with the following rewritten paragraph:

-- To transfer the top tier 18 of pipette tips from the Fig. 2 positions to an empty tip holder 10, the entire subassembly shown in the upper portion of Fig. 3, comprising the transfer plate 20 loaded with tips 11 and on which rests the push plate 36, is simply lowered onto the support surface 12 of the tip holder with the lower tip ends 15 entering the openings 13 in the support surface. It has been found that, because the pipette tips are held loosely on the flexible lips 23 in the apertures in the transfer plate 20, they can be quite easily misaligned such that direct entry into the openings in the support surface of the tip holder might ordinarily be difficult. However, the presence of the upper push plate 36 with the fingers 38 extending into the pipette tips stabilizes the tips and maintains them in an accurate by accurately aligned array so the tips enter the openings in the tip holder readily and without the need for any manual intervention. As the pipette tip ends move into the holder, the bottom ends of the legs 27 on the transfer plate 20 come into supporting contact with the support surface 12 of the tip holder. This preliminary transfer position is shown in Fig. 6. The tips 10 remain suspended from the transfer plate 20 by engagement of the lower ends of the vertical ribs 17 on the tips with the flexible lips 23 in the transfer plate apertures 22. The transfer of tips is completed by unloading the transfer plate by pushing the tips through the transfer plate with the push plate 36 and allowing them to drop a short distance onto the support surface 12 of the tip holder where they are supported by engagement of the lower ends of the ribs 17 on the support surface edges surrounding the openings 13, as shown in Fig. 8. --